REVISIONS This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR. REV DESCRIPTION INITIAL APPROVED RELEASED FOR PRODUCTION. 10/12/2016 SM 8 ASSY ASSY ASSY ASSY QTY QTY B/O Part # Material B/O INFORMATION OR SPECIFICATIONS Description 1 HOIST ASSEMBLY 2 3 WELDMENT 1 4 HORIZONTAL BEAM 1 STEEL TUBE HORIZONTAL BEAM 2 STEEL TUBE 2 VERTICAL BEAM 1 STEEL TUBE 4 BRACE 1 -11 A36/1018/1020 HR 4 -13 1 PLATE A36/1018/1020 HR -15 2 BRACE 2 A36/1018/1020 HR -17 2 CLAMP ASSEMBLY 10 11 1 -19 2 WELDMENT 2 12 CLAMP BEAM 1 A36/1018/1020 HR 13 -23 VERTICAL BEAM 2 STEEL TUBE -25 2 BRACE 3 A36/1018/1020 HR 14 -27 A36/1018/1020 HR 15 2 CLAMP BEAM 2 NOTES: 1. REF. AIRBUS T/N: M259V1000102. 2. LOAD TEST TO 435 Kg (960 LBS). -29 2 ADJUSTABLE BUMPER 6061 16 2 SWING BOLT 17 -31 SS 303 2 PAD 1 18 -33 C200 (I.R. SPECIALTY) -35 2 PAD 2 C200 (I.R. SPECIALTY) -37 2 KNOB ALUMINUM THREADED KNOB (MCMASTER-CARR # 62015K212) MODIFIED 20 4 SOCKET CAP SCREW 10 -39 M6 X 1.0 X 16MM (MCMASTER-CARR # 91292A135) SS TITLE **RESCUE HOIST SLING** 4 HEX HEAD CAP SCREW 10 2 B/O -41 \$TEEL M8 X 1.25 X 50MM (MCMASTER-CARR # 91280A546) B/O -43 STEEL M8 (MCMASTER-CARR # 91166A270) 10 RBEM259V1000102 B/O 10 2 -45 4 LOCKNUT STEEL M6 X 1.25 (MCMASTER-CARR # 90576A117) UNLESS OTHERWISE SPECIFIED

DIMENSIONS ARE IN INCHES

.XXX ± .005 FRACTIONS ± 1/8

.XX ± .01 ANGLES ± .5°

.X ± .1 SURFACES = 125/

1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

... DIMENSIONAL HIMTS ADDITY B/O 10 MATI 2 SPRING PIN -47 SS Ø3MM (MCMASTER-CARR # 91610A408) B/O STEEL M16 X 2 (MCMASTER-CARR # 90695A125) 3 B/O WASHER STEEL M16 (MCMASTER-CARR # 91166A310) -51 3 B/O HOIST RING STEEL -53 RUD # VWBG-V 1.3M16 (GRAINGER # 16A740) DRAWN BY: MACKOVJAK ATTER PLATING
INTERPRET DIM AND TOL PER
ASME Y14.5M-2009 CHECKED: CLOUGH 2 B/O -55 BALL LOCK PIN SS M10 X 65 MM (MCMASTER-CARR # 93680A375) OPPS APPR: ANDERSON B/O LANYARD SS 8 IN. (MCMASTER-CARR # 30345T547) LINDSAY **USED ON MODEL** 2 B/O -59 DRIVE SCREW STEEL .18 IN. SHANK X 3/8 IN LONG (MCMASTER-CARR # 90081A240) APPROVED: GILBERT H175

SCALE

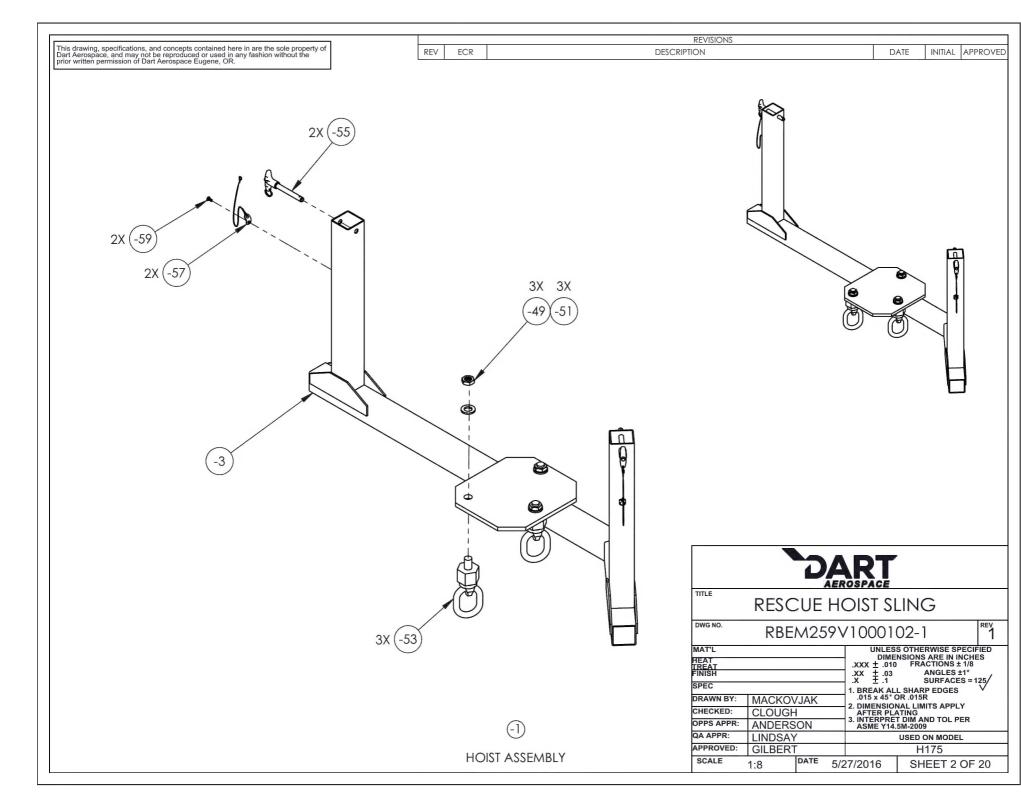
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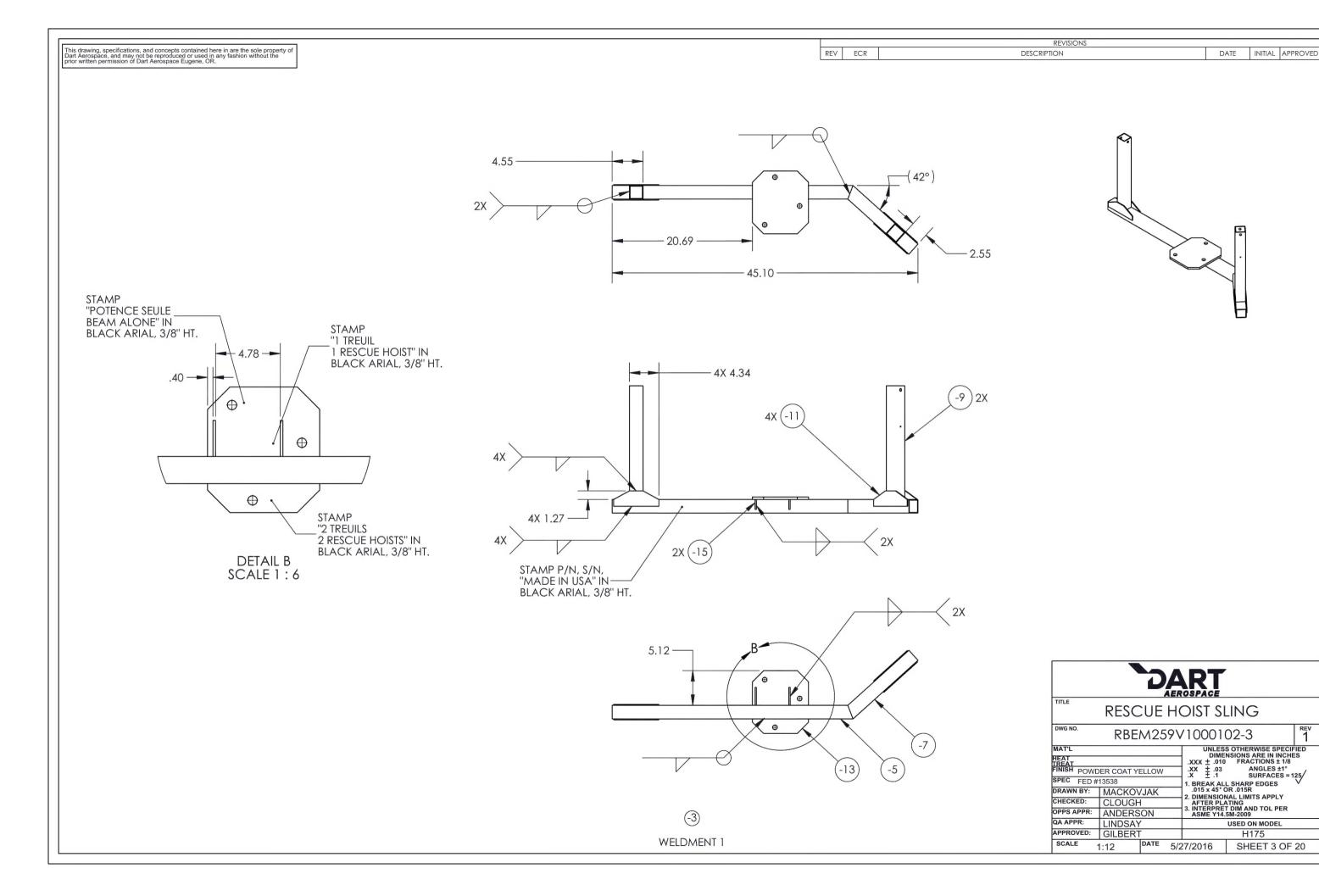
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5/27/2016

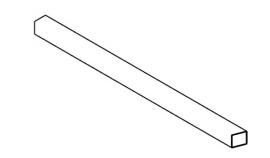
SHEET 1 OF 20

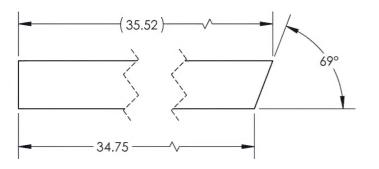
ASSY ASSY ASSY ASSY -19 -17 -3 -1

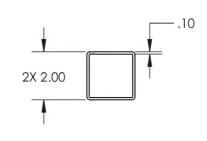




		REVISIONS REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED









RESCUE HOIST SLING

DWG NO.

SCALE

1:4

RBEM259V1000102-5

5/27/2016

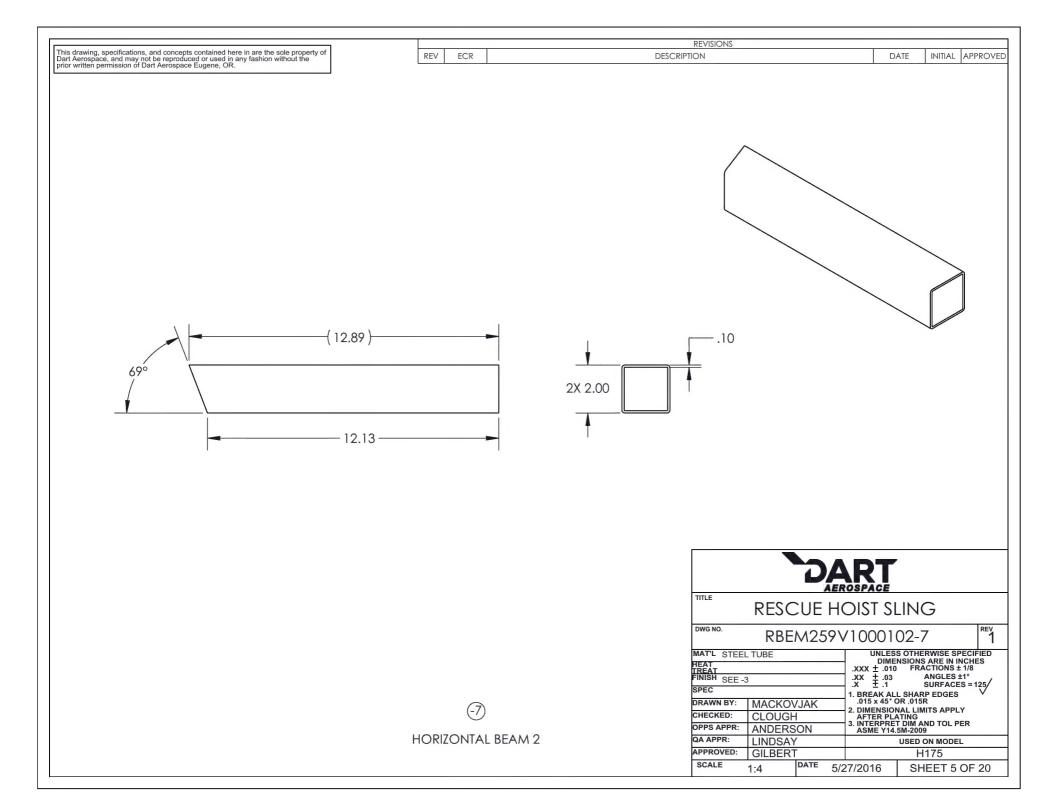
SHEET 4 OF 20

MAT'L STEEL	TUBE	UNLESS OTHERWISE SPECIFIED
HEAT TREAT		DIMENSIONS ARE IN INCHES .XXX + .010 FRACTIONS ± 1/8
FINISH SEE -3	3	.XX + .03 ANGLES ±1° .X ± .1 SURFACES = 125/
SPEC		1. BREAK ALL SHARP EDGES
DRAWN BY:	MACKOVJAK	.015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY
CHECKED:	CLOUGH	AFTER PLATING
OPPS APPR:	ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR:	LINDSAY	USED ON MODEL
APPROVED:	GILBERT	H175

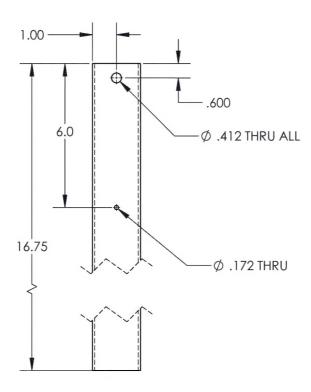
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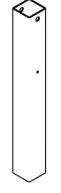
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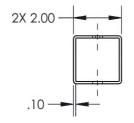
HORIZONTAL BEAM 1



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VERTICAL BEAM 1



RESCUE HOIST SLING

RBEM259V1000102-9

MAT'L STEEL TUBE				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
HEAT TREAT				.xxx ± .010			
FINISH SEE-	FINISH SEE -3				ANGLES ±1° SURFACES = 125/		
SPEC				.X ± .1 SURFACES = 125/ 1. BREAK ALL SHARP EDGES			
DRAWN BY:	MACKO\	/JAK		.015 x 45° C	OR .015R NAL LIMITS APPLY		
CHECKED:	CLOUGH	1		AFTER PLA	ATING		
OPPS APPR:	ANDERS	ON		ASME Y14.	F DIM AND TOL PER 5M-2009		
QA APPR:	LINDSAY	′			USED ON MODEL		
APPROVED: GILBER					H175		
SCALE 1:4		DATE	5/2	27/2016	SHEET 6 OF 20		

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BRACE 1

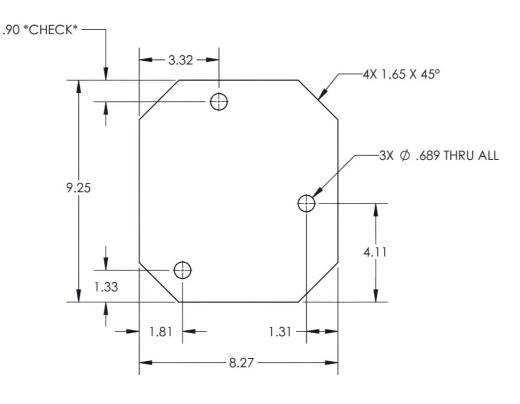
MAT'L A36/1018/1020 HR UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

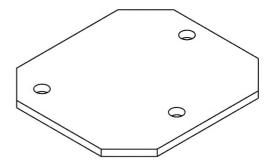
.XXX ± .010 FRACTIONS ± 1/8

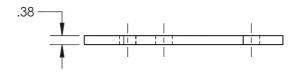
.XX + .03 ANGLES ±1°

X ± .1 SURFACES = 125/ HEAT TREAT FINISH SEE -3 SPEC 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: USED ON MODEL LINDSAY APPROVED: GILBERT H175 SCALE 1:2 5/27/2016 SHEET 7 OF 20

		REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED







AEROSPACE

RESCUE HOIST SLING

DWG NO. RBEM259V1000102-13

MAT'L A36/1018/1020 HR UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

.XXX ± .010 FRACTIONS ± 1/8

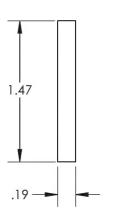
.XX + .03 ANGLES ±1°

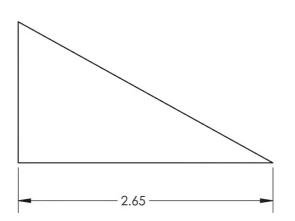
X ± .1 SURFACES = 125/ HEAT TREAT FINISH SEE -3 SPEC 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE 1:4 5/27/2016 SHEET 8 OF 20

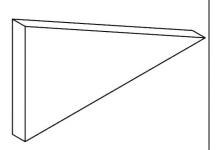
(-13

PLATE

		REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED









TITLE

RESCUE HOIST SLING

DWG NO.

APPROVED:

SCALE

RBEM259V1000102-15

MAT'L A36/1	018/1020 HR	
HEAT TREAT FINISH SEE		.х
OLL	1	.x
SPEC		1. E
DRAWN BY:	MACKOVJAK	2.1
CHECKED:	CLOUGH	- 1
OPPS APPR:	ANDERSON	3. 1
QA APPR:	LINDSAY	

1:1

DIMENSIONS ARE IN INCHES

XXX ± .010 FRACTIONS ± 1/8

XX ± .03 ANGLES ±1°

X ± .1 SURFACES = 125/

BREAK ALL SHAPP EDGES

UNLESS OTHERWISE SPECIFIED

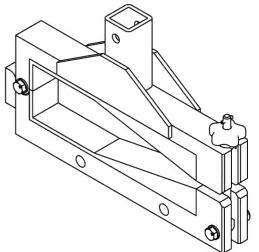
SHEET 9 OF 20

A I . I SURFACES BREAK ALL SHARP EDGES
.015 x 45° OR .015R
.01MENSIONAL LIMITS APPLY
AFTER PLATING
INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

USED ON MODEL LINDSAY GILBERT H175 5/27/2016

BRACE 2

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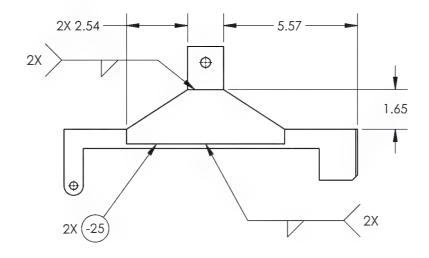
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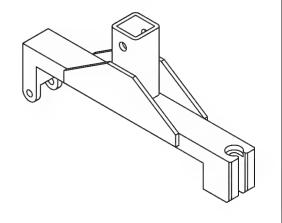
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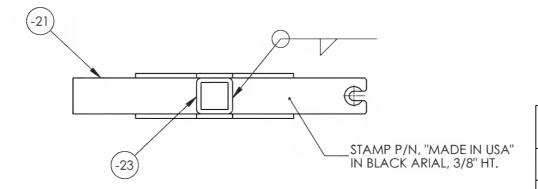
1. ATTACH -33 TO -21 AND -35 TO -27 USING 3M EC-2216 ADHESIVE.

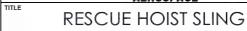
EC-22	16 ADHE	:SIVE.			
		DA AER	RT	,	
TITLE	RESC	CUE HO	IS TSIC	ING	
DWG NO.	RBE	1259V	100010)2-17 REV	
MAT'L HEAT TREAT FINISH					
SPEC DRAWN BY:	MACKO\	/JAK	.015 x 45° (
CHECKED: OPPS APPR:	CLOUGH		2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009		
QA APPR:	LINDSAY	′		USED ON MODEL	
APPROVED:	GILBERT			H175	
SCALE	1:4	DATE 5/2	27/2016	SHEET 10 OF 20	

 REV
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 DESCRIPTION
 DATE
 INITIAL
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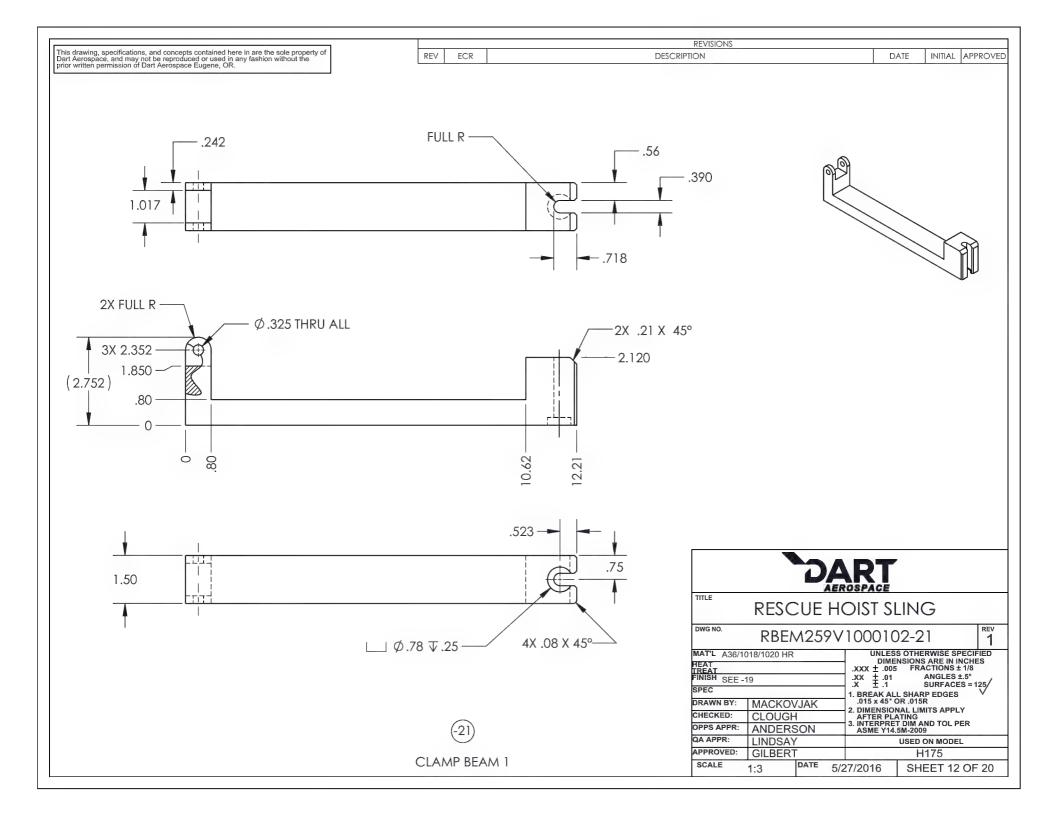


RBEM259V1000102-19

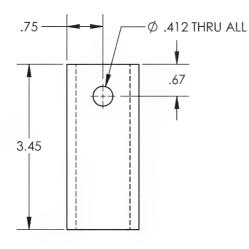
MAT'L				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .010 FRACTIONS ± 1/8			
HEAT TREAT							
FINISH POWDER COAT YELLOW			.XX ± .03	ANGLES ±1° SURFACES = 125	/		
SPEC FED #13538			1. BREAK ALL SHARP EDGES				
DRAWN BY: MACKO		/JAK		.015 x 45° C	OR .015R NAL LIMITS APPLY		
CHECKED:	CLOUGH			AFTER PLA	ATING		
OPPS APPR:	ANDERS	ON		ASME Y14.	T DIM AND TOL PER 5M-2009		
QA APPR:	LINDSAY	′			USED ON MODEL		
APPROVED:	GILBERT	-			H175		
SCALE	1:4	DATE	5/2	27/2016	SHEET 11 OF 2	20	

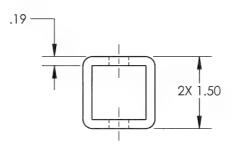
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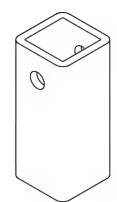
WELDMENT 2

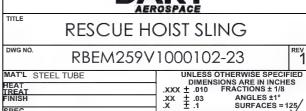


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REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED	









DIMENSIONS ARE IN INCHES

.XXX ± .010 FRACTIONS ± 1/8

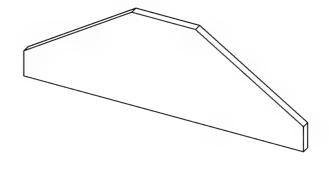
.XX + .03 ANGLES ±1°

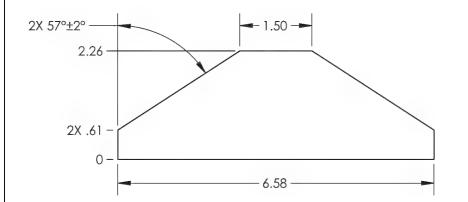
.X ± .1 SURFACES = 125/ SPEC 1. BREAK ALL SHARP EDGES .015 x 45 'OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY USED ON MODEL APPROVED: GILBERT H175 SCALE 1:2 5/27/2016 **SHEET 13 OF 20**

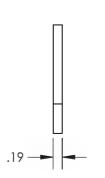


VERTICAL BEAM 2

		REVISIONS			
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED









TITLE

RESCUE HOIST SLING

DWG NO.

SCALE

RBEM259V1000102-25

MAT'L A36/10	018/1020 HR	
HEAT TREAT		╝.
FINISH SEE -	19	-
SPEC		1.
DRAWN BY:	MACKOVJAK	2.
CHECKED:	CLOUGH	
OPPS APPR:	ANDERSON	3.
QA APPR:	LINDSAY	

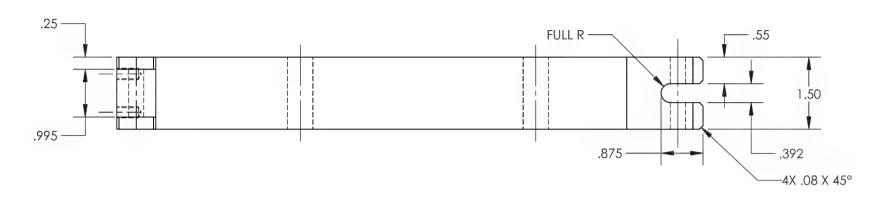
.X I.1 SURFACES =:
1. BREAK ALL SHARP EDGES
2.015 x 45° OR .015R
2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
5. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009

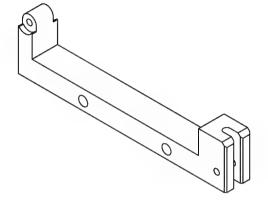
USED ON MODEL LINDSAY APPROVED: GILBERT H175 1:2 5/27/2016 **SHEET 14 OF 20**

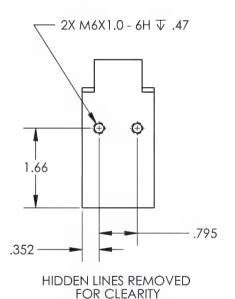
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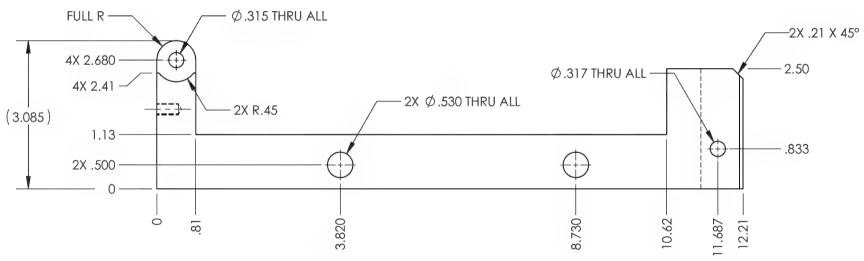
 REVISIONS

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 ECR
 DESCRIPTION
 DATE
 INITIAL
 APPROVED









TITLE RESCUE HOIST SLING DWG NO. RBEM 259 V 1000102-27 MAT'L A36/1018/1020 HR HEAT ITREAT FINISH POWDER COAT YELLOW SPEC FED #13538 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: LINDSAY APPROVED: GILBERT DIMENSIONS ARE IN INCHES .XX ± .01 SWEST OF FRACTIONS ± 1/8 .XX ± .01 SWEST OF FRACTIONS ± 1/8 .XX ± .01 DIMENSIONS ARE IN INCHES .XX ± .0

DATE 5/27/2016

SHEET 15 OF 20

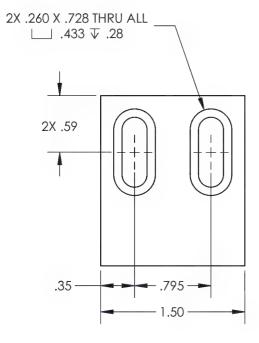
SCALE

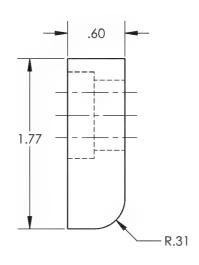
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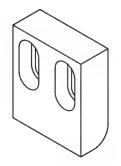
(-27)

CLAMP BEAM 2

REVISIONS									
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED				



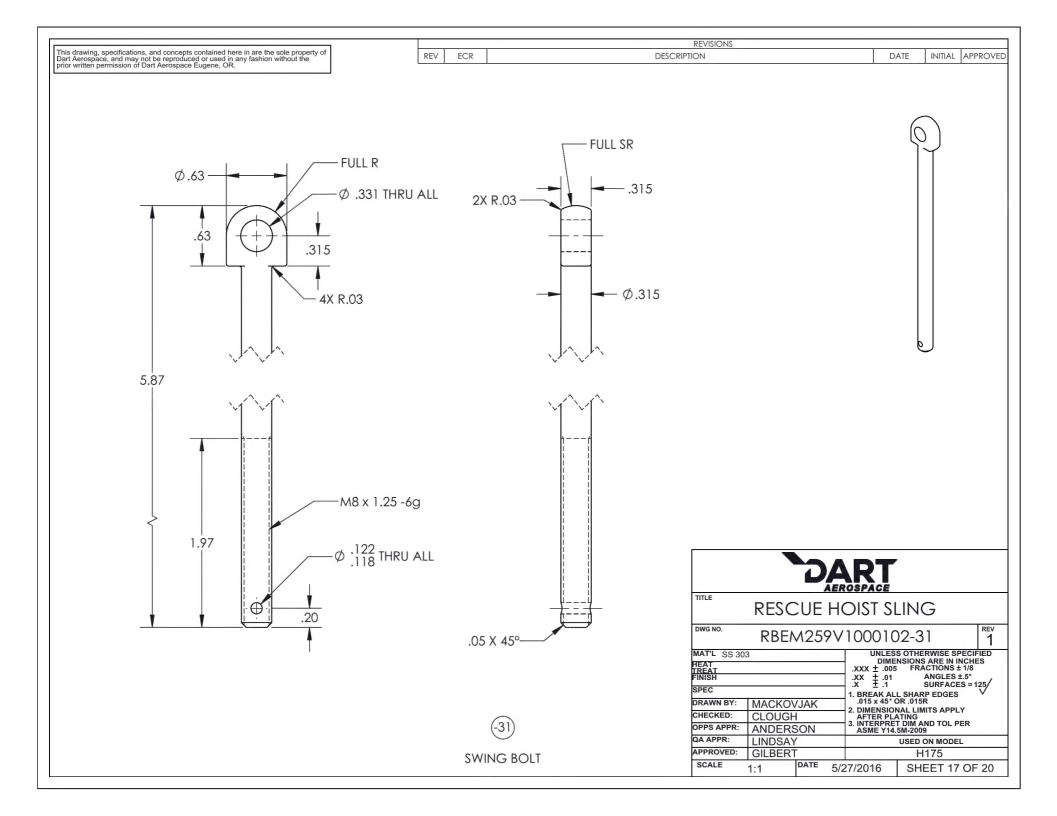






ADJUSTABLE BUMPER

DART								
RESCUE HOIST SLING								
DWG NO.	RBEA	125°	9V	100010)2-29	REV 1		
MAT'L 6061 HEAT IREAT				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± .5°				
FINISH CLEAR ANODIZE SPEC MIL-A-8625F, TYPE II, CLASS I				1. BREAK ALL SHARP EDGES				
DRAWN BY:	MACKO\	OVJAK		.015 x 45° C				
CHECKED:	CLOUGH		2. DIMENSIONAL LIMITS APPLY AFTER PLATING					
OPPS APPR:	ANDERSON		3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009					
QA APPR: LINDSA		Y		USED ON MODEL				
APPROVED:	GILBERT		H175					
SCALE	1:1	DATE	5/2	27/2016	SHEET 16 OF	20		

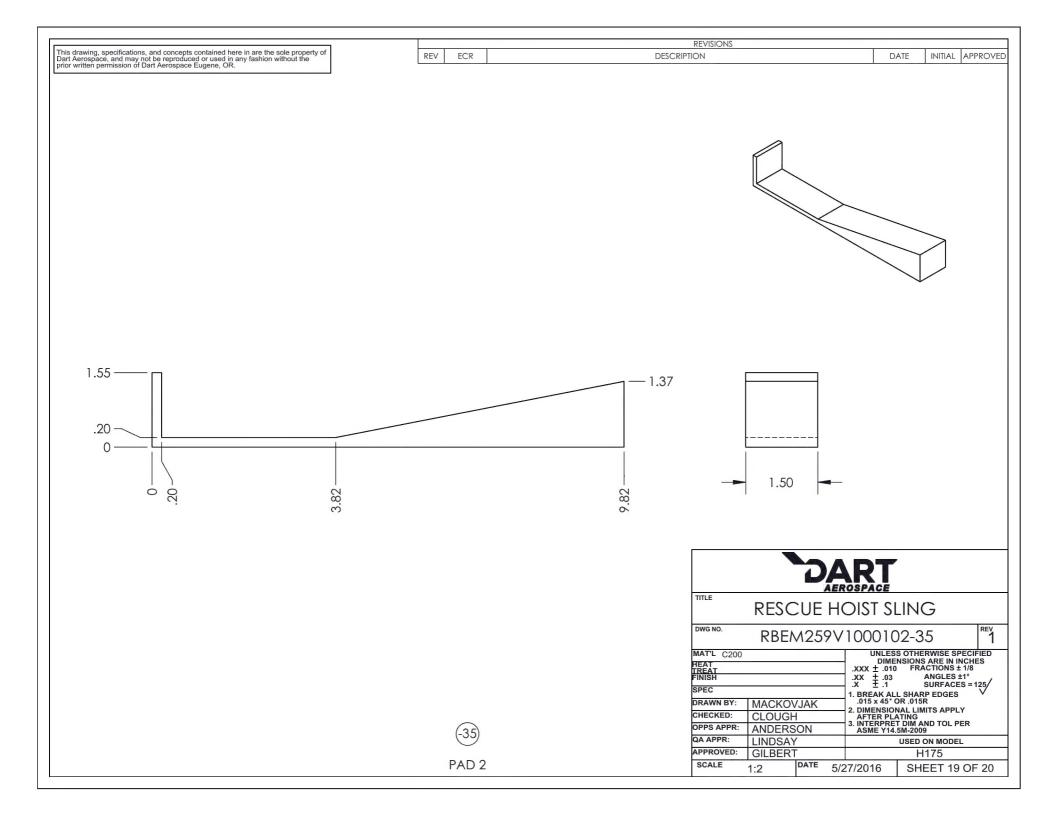


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1. BREAK ALL SHARP EDGES

.015 x 45° OR .015R

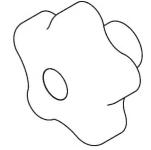
2. DIMENSIONAL LIMITS APPLY
AFTER PLATING
3. INTERPRET DIM AND TOL PER
ASME Y14.5M-2009 DRAWN BY: MACKOVJAK CHECKED: CLOUGH OPPS APPR: ANDERSON QA APPR: USED ON MODEL LINDSAY APPROVED: GILBERT H175 PAD 1 SCALE 1:2 5/27/2016 **SHEET 18 OF 20**

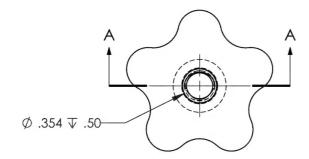


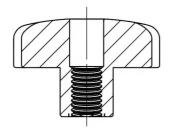
REVISIONS								
REV	EV FCP DESCRIPTION		DATE	INITIAL	APPROVED			

TITLE

SCALE







SECTION A-A



5/27/2016

H175

SHEET 20 OF 20

GILBERT

1:1



KNOB